What is claimed is:

1. A performance data processing method comprising:

a step of receiving a series of performance data;

a detection step of detecting a predetermined type of note controlling performance data from among the series of performance data received by said step of receiving, the predetermined type of note controlling performance data including a control value of a predetermined tone characteristic of a note;

a setting step of, each time the predetermined type of note controlling performance data is detected, setting deviation values for a plurality of channels presenting mutually different deviation states, in order to cause the control value of the predetermined tone characteristic of the note to vary each time the predetermined type of note controlling performance data is detected; and

a generation step of, each time the predetermined type of note controlling performance data is detected, causing the control value of the predetermined tone characteristic of the note, included in the detected predetermined type of note controlling performance data, to vary among the plurality of channels in accordance with respective ones of the deviation values of the channels, set by said setting step, so as to obtain channel-specific control values, and generating, for individual ones of the channels, the channel-specific control values as new control values of the predetermined tone characteristic of the note,

wherein note controlling performance data of the predetermined type having the new control values of the

predetermined tone characteristic of the note, generated by said generation step, are created for the plurality of channels.

2.   A performance data processing method as claimed in claim 1 wherein the predetermined tone characteristic of the note is note-on timing to start tone generation of the note.

3.   A performance data processing method as claimed in claim 1 wherein the predetermined tone characteristic of the note is delay vibrato start timing.

4.   A performance data processing method as claimed in claim 1 wherein the series of performance data and the note controlling performance data of the predetermined type created for the plurality of channels are performance data accompanied by timing data.

5.   A performance data processing method as claimed in claim 1 wherein the deviation values for the plurality of channels are values created on the basis of a characteristic pattern of deviations of the predetermined tone characteristic of the note analyzed when a same musical score was actually performed simultaneously by a plurality of players equal in number to the channels.

6.   A performance data processing method as claimed in claim 1 which further comprises a number-of-channel designation step of designating a desired number N of the channels, and
    wherein said setting step selects deviation values from storage

means storing deviation values for a plurality of channels presenting mutually different deviation states and sets the selected deviation values for the N channels.

7.   A performance data processing method as claimed in 6 wherein the storage section stores, for each of a plurality of channels, deviation values of a predetermined type of tone characteristic in association with a plurality of types of note controlling performance data,

said detection step is directed to detecting any one of the plurality of types of note controlling performance data, and

said setting step selects from the storage means the deviation values, for a plurality of channels, of the predetermined tone characteristic corresponding to the type of note controlling performance data detected by said detection step and thereby sets the deviation values, for the plurality of channels, of the predetermined tone characteristic.

8.   A performance data processing method as claimed in claim 1 wherein said setting step includes a step of further adjusting the set deviation value separately for each of the channels so that the adjusted deviation value of each of the channels is used by said generation step.

9.   A performance data processing method as claimed in claim 1 wherein, in order to cause a control value of another predetermined tone characteristic of the note to vary each time the predetermined

type of note controlling performance data is detected, said setting step further sets other deviation values for the plurality of channels, presenting mutually different deviation states, each time the predetermined type of note controlling performance data is detected,

wherein, each time the predetermined type of note controlling performance data is detected, said generation step causes the control value of the other predetermined tone characteristic of the note, included in the predetermined type of note controlling performance data created for each of the plurality of channels, to vary among the plurality of channels in accordance with a corresponding one of the other deviation values of the channels, further set by said setting step, so as to obtain channel-specific control values of the other predetermined tone characteristic, and thereby further generates the channel-specific control values as new control values of the other predetermined tone characteristic of the note for the individual channels, and

wherein note controlling performance data of the predetermined type having, in addition to the new control values of the predetermined tone characteristic of the note, the new control values of the other predetermined tone characteristic of the note, further generated by said generation step, are created for the plurality of channels.

10.   A performance data processing method comprising:

a step of receiving a series of performance data;

a detection step of detecting a predetermined type of tone generator setting performance data from among the series of

performance data received by said step of receiving, the predetermined type of tone generator setting performance data including a tone generator setting value;

a setting step of, each time the predetermined type of tone generator setting performance data is detected, setting deviation values for a plurality of channels presenting mutually different deviation states; and

a generation step of, each time the predetermined type of tone generator setting performance data is detected, causing the original tone generator setting value, included in the detected predetermined type of tone generator setting performance data, to vary among the plurality of channels in accordance with respective ones of the deviation values of the channels set by said setting step so as to obtain channel-specific tone generator setting values, and generating, for individual ones of the channels, the channel-specific tone generator setting values as new tone generator setting values,

wherein tone generator setting performance data of the predetermined type having the new tone generator setting values, generated by said generation step, are created for the plurality of channels.

11.   A performance data processing method as claimed in claim 10 wherein, in order to cause the original tone generator setting value to vary each time the predetermined type of tone generator setting performance data is detected, said setting step includes a step of setting deviation values for the plurality of channels, presenting mutually different deviation states, each time the predetermined

type of tone generator setting performance data is detected.

12.   A computer program including a group of instructions to cause a computer to perform a performance data processing method, said performance data processing method comprising:

a step of receiving a series of performance data;

a detection step of detecting a predetermined type of note controlling performance data from among the series of performance data received by said step of receiving, the predetermined type of note controlling performance data including a control value of a predetermined tone characteristic of a note;

a setting step of, each time the predetermined type of note controlling performance data is detected, setting deviation values for a plurality of channels presenting mutually different deviation states, in order to cause the control value of the predetermined tone characteristic of the note to vary each time the predetermined type of note controlling performance data is detected; and

a generation step of, each time the predetermined type of note controlling performance data is detected, causing the control value of the predetermined tone characteristic of the note, included in the detected predetermined type of note controlling performance data, to vary among the plurality of channels in accordance with respective ones of the deviation values of the channels set by said setting step so as to obtain channel-specific control values, and generating, for individual ones of the channels, the channel-specific control values as new control values of the predetermined tone characteristic,

wherein   note   controlling   performance   data   of   the

predetermined type having the new control values of the predetermined tone characteristic of the note, generated by said generation step, are created for the plurality of channels.

13.   A performance data processing apparatus comprising:

a receiving section that receives a series of performance data;

a detection section that detects a predetermined type of note controlling performance data from among the series of performance data received by said receiving section, the predetermined type of note controlling performance data including a control value of a predetermined tone characteristic of a note;

a setting section that, each time the predetermined type of note controlling performance data is detected, sets deviation values for a plurality of channels presenting mutually different deviation states, in order to cause the control value of the predetermined tone characteristic of the note to vary each time the predetermined type of note controlling performance data is detected; and

a generation section that, each time the predetermined type of note controlling performance data is detected, causes the control value of the predetermined tone characteristic of the note, included in the detected predetermined type of note controlling performance data, to vary among the plurality of channels in accordance with respective ones of the deviation values of the channels set by said setting section so as to obtain channel-specific control values, and generates, for individual ones of the channels, the channel-specific control values as new control values of the predetermined tone characteristic of the note,

wherein note controlling performance data of the predetermined type having the new control values of the predetermined tone characteristic of the note, generated by said generation section, are created for the plurality of channels.

14.   A tone signal synthesizing method comprising:

a step of receiving a series of performance data;

a detection step of detecting a predetermined type of note controlling performance data from among the series of performance data received by said step of receiving, the predetermined type of note controlling performance data including a control value of a predetermined tone characteristic of a note;

a setting step of, each time the predetermined type of note controlling performance data is detected, setting deviation values for a plurality of channels presenting mutually different deviation states, in order to cause the control value of the predetermined tone characteristic of the note to vary each time the predetermined type of note controlling performance data is detected;

a generation step of, each time the predetermined type of note controlling performance data is detected, causing the control value of the predetermined tone characteristic of the note, included in the detected predetermined type of note controlling performance data, to vary among the plurality of channels in accordance with respective ones of the deviation values of the channels set by said setting step so as to obtain channel-specific control values, and generating, for individual ones of the channels, the channel-specific control values as new control values of the predetermined tone characteristic of the

note; and

a tone synthesis step of synthesizing tone signals for the plurality of channels in accordance with note controlling performance data of the predetermined type having the new control values of the predetermined tone characteristic of the note generated by said generation step.

15.   A performance data processing method comprising:

a step of receiving a series of performance data;

a detection step of detecting a predetermined type of note controlling performance data from among the series of performance data received by said step of receiving, the predetermined type of note controlling performance data including a control value of a predetermined tone characteristic of a note;

a phrase detection step of detecting a break in a phrase within the series of performance data;

a setting step of, each time the predetermined type of note controlling performance data is detected, setting a deviation value for at least one channel, in order to cause the control value of the predetermined tone characteristic of the note to vary each time the predetermined type of note controlling performance data is detected, said setting step setting the deviation value such that a deviation state of the deviation value of the at least one channel is varied each time a break in a phrase within the series of performance data is detected; and

a generation step of, each time the predetermined type of note controlling performance data is detected, causing the control value of

the predetermined tone characteristic of the note, included in the detected predetermined type of note controlling performance data, to vary in accordance with the deviation value of the at least one channel set by said setting step so as to obtain a varied control value, and generating the varied control value as a new control value of the predetermined tone characteristic of the note,

wherein note controlling performance data of the predetermined type having the new control value of the predetermined tone characteristic of the note, generated by said generation step, is created for at least one channel.

16.   A performance data processing method as claimed in claim 15 wherein said phrase detection step detects a break in a phrase within the series of performance data by detecting a break in a train of notes within the series of performance data.

17.   A performance data processing method as claimed in claim 15 wherein the predetermined tone characteristic of the note is note-on timing to start tone generation of the note.

18.   A performance data processing method as claimed in claim 15 wherein the series of performance data and the note controlling performance data of the predetermined type created for at least one channel are performance data accompanied by timing data.

19.   A performance data processing method as claimed in claim 15 wherein the deviation value for the at least one channel is a value

created on the basis of a characteristic pattern of deviation of the predetermined tone characteristic of the note analyzed when a same musical score was actually performed by at least one player.

20.   A performance data processing method as claimed in claim 15 wherein said setting step designates, from storage means storing for at least one channel a series of deviation values indicative of a deviation state, an initial value in the series of deviation values of the at least one channel each time a break in a phrase within the series of performance data is detected and reads out, in accordance with predetermined order, one of the deviation values of the at least one channel starting with the designated initial value each time the predetermined type of note controlling performance data is detected, to thereby set the deviation value for the at least one channel.

21.   A performance data processing method as claimed in claim 20 wherein said setting step performs an arithmetic operation on the deviation value of the at least one channel, read out from the storage means, to vary the deviation state each time a break in a phrase within the series of performance data is detected.

22.   A performance data processing method as claimed in claim 20 wherein said storage means stores a plurality of series of deviation values for a plurality of channels presenting mutually different deviation states, and

wherein said setting step selects the series of deviation values of at least one channel from said storage means, to thereby set the

deviation value.

23. A performance data processing method as claimed in claim 22 which further comprises a characteristic pattern detection step of detecting, for each performance section divided by the break in the phrase, a characteristic pattern of a train of notes included in the performance data within the performance section, and

wherein said setting step selects, in accordance with the characteristic pattern detected by said characteristic pattern detection step, a series of deviation values of at least one of the channels which is suitable for the detected characteristic pattern.

24. A performance data processing method as claimed in claim 15 wherein said setting step designates, from storage means storing for at least one channel a plurality of series of deviation values indicative of mutually different deviation states, any one of the plurality of series of deviation values for the at least one channel each time a break in a phrase within the series of performance data is detected and reads out in order the deviation values of the designated series of deviation values each time the predetermined type of note controlling performance data is detected, to thereby set the deviation value for the at least one channel.

25. A performance data processing method as claimed in claim 20 wherein, each time the predetermined type of note controlling performance data is detected, said setting step reads out one of the deviation values in the series of deviation values for the at least one

channel first in accordance with predetermined order where deviation value readout is executed first in a forward direction and then in a reverse direction and then the deviation value readout in the forward direction and reverse direction is repeated.

26.   A performance data processing method as claimed in claim 20 wherein the storage section stores, for at least one channel, deviation values of a predetermined type of tone characteristic in association with a plurality of types of note controlling performance data, and

said setting step selects from the storage means the deviation values, for at least one channel, of the predetermined tone characteristic in accordance with the type of note controlling performance data and thereby sets the deviation value, for the at least one channel, of the predetermined tone characteristic.

27.   A performance data processing method as claimed in claim 15 wherein said setting step includes a step of further adjusting the set deviation value for at least one channel so that the adjusted deviation value is used by said generation step.

28.   A performance data processing method comprising:

a step of receiving a series of performance data;

a detection step of detecting a predetermined type of tone generator setting performance data from among the series of performance data received by said step of receiving, the predetermined type of tone generator setting performance data

including a tone generator setting value;

a phrase detection step of detecting a break in a phrase within the series of performance data;

a setting step of setting a deviation value for at least one channel to cause the original tone generator setting value to vary each time the predetermined type of tone generator setting performance data is detected or each time a break in a phrase within the series of performance data is detected; and

a generation step of, each time the predetermined type of tone generator setting performance data is detected, causing the original tone generator setting value, included in the detected predetermined type of tone generator setting performance data, to vary in accordance with the deviation value of at least one channel set by said setting step so as to obtain a varied tone generator setting value and generating the varied tone generator setting value as a new tone generator setting value, said generation step being also arranged to, each time a break in a phrase within the series of performance data is detected, cause the tone generator setting value, included in the predetermined type of tone generator setting performance data last detected by said detection step, to vary in accordance with the deviation value of the at least one channel set by said setting step so as to obtain a varied tone generator setting value and then generate the varied tone generator setting value as a new tone generator setting value,

wherein tone generator setting performance data of the predetermined type having the new tone generator setting value, generated by said generation step, is created for the at least one

channel.

29.   A computer program including a group of instructions to cause a computer to perform a performance data processing method, said performance data processing method comprising:

a step of receiving a series of performance data;

a detection step of detecting a predetermined type of note controlling performance data from among the series of performance data received by said step of receiving, the predetermined type of note controlling performance data including a control value of a predetermined tone characteristic of a note;

a phrase detection step of detecting a break in a phrase within the series of performance data;

a setting step of, each time the predetermined type of note controlling performance data is detected, setting a deviation value for at least one channel, in order to cause the control value of the predetermined tone characteristic of the note to vary each time the predetermined type of note controlling performance data is detected, said setting step setting the deviation value such that a deviation state of the deviation value of the at least one channel is varied each time a break in a phrase within the series of performance data is detected; and

a generation step of, each time the predetermined type of note controlling performance data is detected, causing the control value of the predetermined tone characteristic of the note, included in the detected predetermined type of note controlling performance data, to vary in accordance with the deviation value of the at least one

channel set by said setting step so as to obtain a varied control value, and generating the varied control value as a new control value of the predetermined tone characteristic of the note,

wherein note controlling performance data of the predetermined type having the new control values of the predetermined tone characteristic of the note, generated by said generation step, is created for at least one channel.

30. A performance data processing apparatus comprising:

a receiving section that receives a series of performance data;

a detection section that detects a predetermined type of note controlling performance data from among the series of performance data received by said receiving section, the predetermined type of note controlling performance data including a control value of a predetermined tone characteristic of a note;

a phrase detection section that detects a break in a phrase within the series of performance data;

a setting section that, each time the predetermined type of note controlling performance data is detected, sets a deviation value for at least one channel, in order to cause the control value of the predetermined tone characteristic of the note to vary each time the predetermined type of note controlling performance data is detected, said setting section setting the deviation value such that a deviation state of the deviation value of the at least one channel is varied each time a break in a phrase within the series of performance data is detected; and

a generation section that, each time the predetermined type of

note controlling performance data is detected, causes the control value of the predetermined tone characteristic of the note, included in the detected predetermined type of note controlling performance data, to vary in accordance with the deviation value of the at least one channel set by said setting section so as to obtain a varied control value, and generates the varied control value as a new control value of the predetermined tone characteristic of the note,

wherein note controlling performance data of the predetermined type having the new control values of the predetermined tone characteristic of the note, generated by said generation means, is created for at least one channel.

31. A tone signal synthesis method comprising:

a step of receiving a series of performance data;

a detection step of detecting a predetermined type of note controlling performance data from among the series of performance data received by said step of receiving, the predetermined type of note controlling performance data including a control value of a predetermined tone characteristic of a note;

a phrase detection step of detecting a break in a phrase within the series of performance data;

a setting step of, each time the predetermined type of note controlling performance data is detected, setting a deviation value for at least one channel, in order to cause the control value of the predetermined tone characteristic of the note to vary each time the predetermined type of note controlling performance data is detected, said setting step setting the deviation value such that a deviation

state of the deviation value of the at least one channel is varied each time a break in a phrase within the series of performance data is detected;

a generation step of, each time the predetermined type of note controlling performance data is detected, causing the control value of the predetermined tone characteristic of the note, included in the detected predetermined type of note controlling performance data, to vary in accordance with the deviation value of the at least one channel set by said setting step so as to obtain a varied control value, and generating the varied control value as a new control value of the predetermined tone characteristic of the note; and

a tone synthesis step of synthesizing a tone signal for the at least one channel in accordance with note controlling performance data of the predetermined type having the new control values of the predetermined tone characteristic of the note generated by said generation step.